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PATENT  
Attorney Docket No. ASC-044

*COPY OF AMDT W/REQ. FOR RCE, FILED ON 04/17/03.*  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Eugene A. Fitzgerald et al.  
SERIAL NO.: 09/884,172 GROUP NO.: 2812  
FILING DATE: June 19, 2001 EXAMINER: Christopher W. Lattin  
TITLE: METHOD OF FABRICATING CMOS INVERTER AND  
INTEGRATED CIRCUITS UTILIZING STRAINED SILICON  
SURFACE CHANNEL MOSFETS

Box RCE  
Commissioner for Patents  
Washington, D.C. 20231

**AMENDMENT AND RESPONSE TO THE OUTSTANDING OFFICE ACTION**

Sir:

This is an amendment to the above-identified application in response to the Office Action mailed on January 24, 2003.

**In the Claims**

Please amend the claims in accordance with the clean and marked-up versions that accompany this paper.

**REMARKS**

In the Office Action mailed on January 24, 2002, the Examiner rejected claims 1, 4-13, and 16-25 as obvious over Rim et al. in view of Kub et al. The Examiner notes that Kub et al. teaches a surface roughness of less than 10 Å, concluding, "It would have been obvious to one skilled in the art at the time of the invention to planarize, either by

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polishing or oxide formation according to the method taught by Kub et al., a layer between the substrate and the strained layer ... in order to enhance adhesion."

For the reasons that follow, we respectfully traverse this contention to the extent it is maintained against the amended claims. Certainly the present inventors do not claim to have originated planarization, and we recognize the utility of a smooth surface in the bonding context of Kub et al. — i.e., to enhance adhesion between surfaces brought into contact.

The present invention, however, is directed toward use of a planarized layer beneath a strained layer. It is found that the smoothness imparted to an intermediate layer by planarization persists in an overlying layer, even if the overlying layer is strained (i.e., lattice-mismatched with respect to an underlying layer), and even if that layer is deposited epitaxially. We have amended claim 1 to emphasize this concept, which is neither taught nor suggested by Kub or by Rim et al.

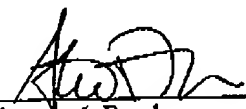
Accordingly, we submit that all claims are now in condition for allowance. Please charge any fee occasioned by this paper to our Deposit Account No. 20-0531.

Respectfully submitted,

Date: April 17, 2003  
Reg. No. 33,497

Tel. No.: (617) 310-8108  
Fax No.: (617) 248-7100

2606791

  
Steven J. Frank  
Attorney for Applicant(s)  
Testa, Hurwitz, & Thibault, LLP  
High Street Tower  
125 High Street  
Boston, Massachusetts 02110